

CLAIMS:

1. An apparatus for generating a combined image of an object, the apparatus comprising

5 a first reflector;

a second reflector in reflective communication with the first reflector and with a first portion of the object corresponding to a first perspective view of the object;

a third reflector in reflective communication with the first reflector and a second portion of the object corresponding to a second perspective view of the object; and

10 a camera receiving the first and second perspective views from the first reflector and forming the combined image from the first and second perspective views.

2. The apparatus of claim 1, wherein the first reflector includes a first reflective portion in reflective communication with the second reflector and a second reflective portion in reflective communication with the third reflector.

15 3. The apparatus of claim 1, wherein the first reflector includes a reflective panel having a first end and a second end, the first and second ends being displaced toward each other to form a vertex substantially in the center of the reflective panel.

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4. The apparatus of claim 1, further comprising an actuator coupled to the first reflector, the actuator moving the first reflector between a first position in reflective communication with the second reflector and a second position in reflective communication with the third reflector.

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5. The apparatus of claim 4, wherein the actuator comprises a galvanometer.

30 6. The apparatus of claim 1, further comprising a first actuator coupled to the second reflector and a second actuator coupled to the third reflector, the first actuator moving the second reflector between a first position and a second position, the second actuator moving the third reflector between a first position and a second position.

7. The apparatus of claim 6, wherein the first and second actuators comprise galvanometers.

5 8. The apparatus of claim 1, further comprising a substrate, the first reflector, second reflector, third reflector, and camera being secured to the substrate, the substrate being movable between a first position and a second position.

10 9. The apparatus of claim 1, wherein the apparatus is coupled to a motor vehicle.

10 10. The apparatus of claim 1, further comprising a processing unit coupled to the camera.

15 11. The apparatus of claim 1, wherein the combined image is a stereo image.

12. An apparatus for generating a combined image of an object, the apparatus comprising

a first reflector movable between a first position and a second position;

20 a second reflector in reflective communication with the first reflector when the first reflector is in the first position and with a first portion of the object corresponding to a first perspective view of the object;

a third reflector in reflective communication with the first reflector when the first reflector is in the second position and a second portion of the object corresponding to a second perspective view of the object;

25 a camera receiving the first and second perspective views from the first reflector; and

a processing unit coupled to the camera, the processing unit receiving the first and second perspective views from the camera and forming the combined image from the first and second perspective views.

30 13. The apparatus of claim 12, further comprising an actuator coupled to the first reflector, the actuator moving the first reflector between the first and second positions.

14. The apparatus of claim 13, wherein the actuator is a galvanometer.

15. The apparatus of claim 12, wherein the first reflector comprises a panel
5 having at least one substantially reflective side.

16. The apparatus of claim 12, further comprising a first actuator coupled to the
second reflector and a second actuator coupled to the third reflector, the first actuator
moving the second reflector between a first position and a second position, the second
10 actuator moving the third reflector between a first position and a second position.

17. The apparatus of claim 16, wherein the first and second actuators comprise
galvanometers.

15 18. The apparatus of claim 12, further comprising a substrate, the first reflector,
second reflector, third reflector, and camera being secured to the substrate, the substrate
being movable between a first position and a second position.

19. The apparatus of claim 12, wherein the apparatus is coupled to a motor
20 vehicle.

20. An apparatus for generating a combined image of an object, the apparatus
comprising
means for reflecting a first perspective view of the object;
25 means for reflecting a second perspective view of the object; and
a camera receiving the first and second perspective views and forming the
combined image from the first and second perspective views.